

TFG6800 Series

Function/Arbitrary Waveform Generator



* without option PA

Features

- 250MSa/s sample rate, 16bit vertical resolution and 16Mpts waveform length
- Rise/fall time of Square: $\leq 4.2\text{ns}$
- Removable PA (option)
- Optional IOT interface
- High precision frequency counter
- 7" touch screen display

Model	TFG6803	TFG6806	TFG6810
Sine/Square	1 μ Hz-35MHz	1 μ Hz~65MHz	1 μ Hz~100MHz

Specification

Frequency

Pulse	1μHz-25MHz
Ramp	1μHz-3MHz
PRBS	1kbps~60Mbps
Noise (-3dB)	100MHz Width
Other	1μHz~20MHz
Resolution	1μHz or 12 digits
Accuracy	±(20ppm + 14pHz)

Waveform

Type	165 kinds include: Sine, Square, Ramp, Pulse, Noise, DC, PRBS, user-defined Arbitrary waveform, user-defined harmonic, etc	
Smample Rate	250MSa/s	
Vertical Resolution	16 bits	
Arbitrary	Sample Rate	1μSa/s~125MSa/s
	Length	2~16Mpts
	Resolution	16 bits
Square	Rise/Fall Time	≤4.2ns
	Duty Cycle	0.0001%~99.9999%
Pulse	Rise/Fall Time	≥8ns
	Width	13ns ~ (period - 13ns)

Amplitude

Range	1mVpp~20Vpp, frequency≤10MHz 1mVpp~10Vpp, frequency>10MHz
Resolution	1mVpp or 4digits
Accuracy	±(of settings value×1%+1mV), Sine 1kHz, ≥10mVpp, offset 0V

Modulation

FM,AM,PM, PWM,Sum	Carrier Waveform	Sine, Square, Ramp (only pulse for PWM), etc.
	Modulating Waveform	Sine, Square, Ramp, etc.
	Modulating Frequency	1mHz to 100kHz
FSK,4FSK,NFSK, PSK,4PSK,NPSK, ASK,OSK	Carrier Waveform	Sine, Square, Ramp, ect
	Hop Frequency	1μHz -upper limits
	Hop Rate	1MHz to 1MHz

General Characteristic

Power	AC 100~240V, 50/60Hz ±10% , AC 100~120V, 400Hz ±10%
Dimension & Weight	220mm×190mm×124mm, Approx. 2.9kg
	220mm×190mm×166mm, Approx. 3.3kg (if amplifier power is selected)

Offset

Range	±10Vpk(ac+dc)
Resolution	1mVdc
Accuracy	±(setting value ×1%+2mV+ amplitude value ×0.5%)

Sweep

Range	1μHz ~ upper frequency limit
Type	Linear, logarithmic
Time	1ms to 500s

Burst

Mode	Triggered, Gated
Period	1μs to 600s
Count	1 to 100000000 cycles

Counter

Frequency Range	1mHz to 400MHz
Resolution	8 digits/s
Period and Pulse Width Measurement	100ns to 20s
Duty Cycle Measurement	0.1% to 99.9%

Options

TCXO	±1ppm accuracy, ±1ppm/year aging rate
Power Amplifier	2 times power amplifier, Max output power 8W (8Ω)
IOT interface	Based on LoRa

Standard Accessories

Power Cord	1
BNC cable	1
CD(software+manual)	1